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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,931	08/21/2003	Cheol-Min Jeon	1349.1271	7373

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

SINGH, RAMNANDAN P

ART UNIT PAPER NUMBER

2646

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,931

Applicant(s)

JEON, CHEOL-MIN

Examiner

Ramnandan Singh

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RM

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy in the Korean language filed on Aug. 21, 2003 has been received.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-12 and 15-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang [US 6,473,629 B1].

Regarding claim 1, Chang teaches a communication apparatus having a one-way speakerphone function shown in Fig. 1. comprising:

a handset (114) connected to the communication apparatus by a transmit-receive line, wherein the transmit-receive line is enabled when the handset of the communication apparatus is off-hook [col. 2, lines 52-59];

a speaker (107) outputting a sound of the handset communication;

an input key part (120) comprising a selection key for the one-way speakerphone function and a plurality of dial keys; and

a central control device (112) controlling the one-way speakerphone function; wherein a conversation signal is transmitted through the speaker in response to the handset being off-hook, the one-way speakerphone function selection key signal being input, and dialing being completed [col. 3, lines 7-16; Fig. 2B].

Claims 3, 6, and 17 are essentially similar to claim 1 and are rejected for the reasons stated above.

Claim 21 is essentially similar to claim 1 except for a machine-readable storage. Chang further teaches a memory device 110 including a ROM for storing a control program executed by the control unit 112 [col. 2, lines 40-56; Fig. 2].

Regarding claims 2, 4-5 and 18-20, these attributes are inherently present in the operation of a speakerphone.

Regarding claim 7, the limitation is inherent with the operation of a handset [Fig. 1].

Regarding claim 8, Chang further teaches the communication apparatus

Art Unit: 2646

comprising an input key part comprising a selection key for the one-way speakerphone function and a plurality of dial keys [col. 3, lines 7-28].

Regarding claims 9-11, the limitations are shown above.

Regarding claim 12, Chang further teaches the communication apparatus, wherein a line interface unit opens or blocks the transmit-receive line of the handset, and allows a transmit-receive signal to be output through the speaker, under control of the control device [col. 3, lines 16-40]. In essence, this is the basic principle of operating one-way (half-duplex) speakerphone (communication device).

Regarding claim 15, Chang further teaches the communication apparatus Chang further teaches a memory device 110 including a ROM for storing a control program executed by the control unit 112 [col. 2, lines 40-56; Fig. 2].

Regarding claim 16, the limitations are shown above.

4. Claims 1-12 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Arbel [US 4,879,745].

Regarding claim 1, Arbel teaches a communication apparatus having a one-way (i.e. half-duplex) speakerphone function shown in Fig. 1, comprising:

Art Unit: 2646

a handset connected to the communication apparatus by a transmit-receive line, wherein the transmit-receive line is enabled when the handset of the communication apparatus is off-hook [Fig. 1];

a speaker outputting a sound of the handset communication [Fig. 2; col. 1, lines 30-46]];

an input key part (1) comprising a selection key for the one-way speakerphone function and a plurality of dial keys [Fig. 1] ; and

a central control device (i.e. control state machine 72) controlling the one-way speakerphone function; wherein a conversation signal is transmitted through the speaker in response to the handset being off-hook, the one-way speakerphone function selection key signal being input, and dialing being completed [Figs. 1-4E; col. 2, line 44 to col. 3, line 37].

Claims 3, 6, and 17 are essentially similar to claim 1 and are rejected for the reasons stated above.

Regarding claim 2, Arbel further teaches the communication apparatus having a one-way speakerphone function, wherein when the dial key signal is not input within a predetermined time of the handset being off-hook (i.e. active-state) and with the one-way speakerphone function selection key signal being input, the central control device switches to an on-hook dial mode in which a user dials with the handset being on-hook (i.e. passive state), and the conversation signal is output through the speaker [col. 3,

Art Unit: 2646

lines 7-33].

Claim 4 is essentially similar to claim 2 and is rejected for the reasons stated above.

Regarding claims 5 and 18-20, these attributes are inherently present in the operation of a speakerphone.

Regarding claim 7, the limitation is inherent with the operation of a handset [Fig. 1].

Regarding claim 8, Arbel further teaches the communication apparatus, comprising an input key part (1) comprising a selection key for the one-way speakerphone function and a plurality of dial keys [Fig. 1].

Regarding claims 9-11, the limitations are shown above.

Regarding claim 12, Arbel further teaches the communication apparatus, wherein a line interface unit opens or blocks the transmit-receive line of the handset, and allows a transmit-receive signal to be output through the speaker, under control of the control device (72) [Figs. 1-3, 4E; col. 7, lines 57-65; col. 1, line 59 to col. 2, line 26].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21 and 13-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Arbel [US 4,879,745].

Regarding claim 21, Arbel teaches a controlling device (72) device to perform a process of controlling a communication apparatus, the controlling process comprising:

opening a transmit-receive line of a handset connected to the communication apparatus when the handset is taken off-hook (i.e. active state) [col. 3, lines 7-21];

determining using a comparator (70) whether a one-way speakerphone mode has been selected [col. 7, lines 57-67]; and

upon determining that a dialing has been completed, opening a line connected to a speaker of the communication apparatus and performing the one-way speakerphone function to output a sound through the speaker during the handset conversation [Figs. 1-4E; col. 2, line 44 to col. 3, line 37].

Regarding a machine-readable storage, although Arbel teaches a software implemented state machine (72) using a digital signal processor (DSP) (20) [Figs. 1, 3; col. 2, lines 13-16; col. 2, lines 53-55], it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a machine-readable storage, such as ROM (read-only-memory) of the DSP, to store the control program in order to automate the controlling process and speed up the execution of the software implemented state machine.

Regarding claim 13, Arbel further teaches using a DSP which may be a computer including a personal computer.

Regarding claims, 14-16, the limitations are shown above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sanserino [US 5,748,707] teaches a speakerphone [Figs. 1-9; Abstract].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramnandan Singh
Examiner
Art Unit 2646



SINH TRAN
SUPERVISORY PATENT EXAMINER